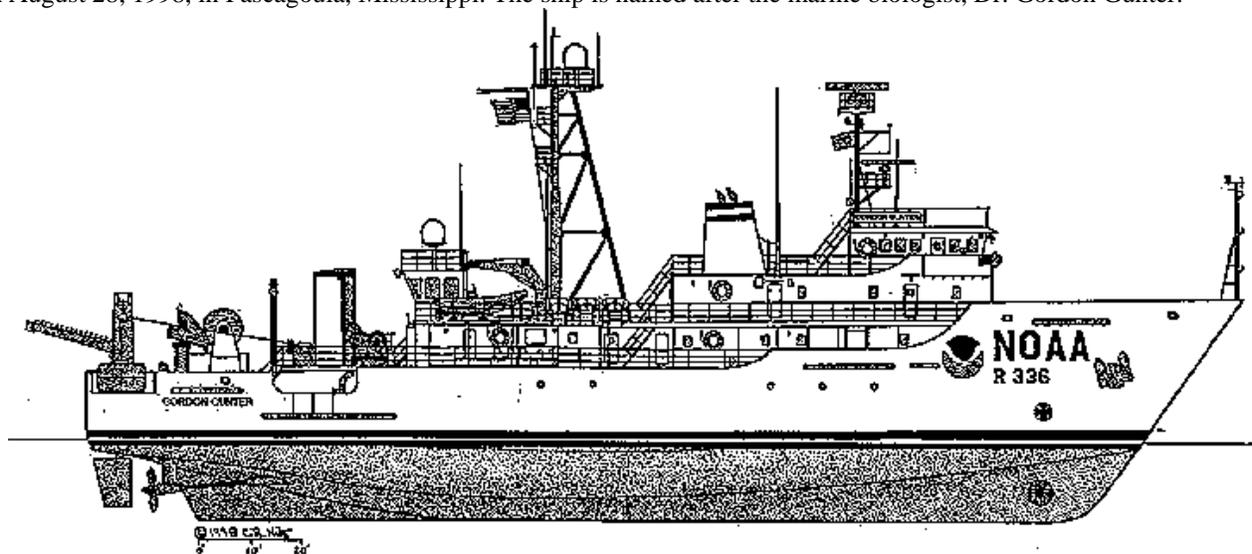


# GORDON GUNTER

**NOAA Ship GORDON GUNTER** conducts fishery and marine resource research supporting NOAA's National Marine Fisheries Service (NMFS), Pascagoula Laboratory in Pascagoula, Mississippi. The ship conducts scientific surveys of the health and abundance of adult and larval commercial and recreational fish, health and distribution of marine mammals, oceanographic studies and habitat investigations. **GORDON GUNTER** normally operates in the Gulf of Mexico and Caribbean Sea. NOAA Marine and Aviation Operations operates the vessel.

**GORDON GUNTER** was originally built as the U.S. Naval Ship **RELENTLESS** (T-AGOS 18) in 1989 by Halter Marine in Moss Point, Mississippi. **RELENTLESS** was operated by the Military Sealift Command as an Ocean Surveillance Ship until her transfer to NOAA on March 17, 1993. **RELENTLESS** was commissioned as **NOAA Ship GORDON GUNTER** on August 28, 1998, in Pascagoula, Mississippi. The ship is named after the marine biologist, Dr. Gordon Gunter.



Line Drawing by Bob Hitz

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## Design

- Builder: Halter Marine, Inc., Moss Point, Mississippi
- Launched: May 12, 1989
- Delivered to MSC: January 12, 1990
- Transferred to NOAA: March 17, 1993
- Commissioned by NOAA: August 28, 1998
- Hull Number: R336
- Call Letters: WTEO
- Home Port: Pascagoula, MS
- Length (LOA): 68.3 m (224 ft)
- Breadth (moulded): 13.1 m (43 ft.)
- Draft, Maximum: 4.6 m (15 ft.)
- Hull: Welded Steel/Ice Strengthened
- Load Line Displacement: 2,328 tons
- Light Ship Displacement: 1,546 tons
- Gross Tonnage: 1,904 (Int'l) 1486 (U.S.)
- Net Tonnage: 971 tons (U.S.)

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## Speed & Endurance

- Cruising Speed: 10.5 knots
- Range: 8,000 nmi
- Endurance: 30 days
- Endurance Constraint: Stability

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## Complement

- Commissioned Officers: 5
- Crew: 10
- Licensed Engineers: 3
- Scientists: 15 (Max)

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## Food Service Seating Capacity

- Mess Room: 18

## Berthing Capacity

- Single Staterooms: 19
- Double Staterooms: 8
- Total Bunks: 35

## Medical Facilities

- Medical Treatment Room with one bunk.
- Emergency and first-aid equipment aboard, administered by designated vessel personnel.

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## Laboratory Spaces

- Wet Lab: 440 sq. ft.
- Hydro Chem Lab: 216 sq. ft.
- Dry Lab: 387.5 sq. ft.
- Marine Mammal Observations Station

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## Winches

- Oceanographic Winch (used for bongos, neustons)
  - Manufacturer: Markey
  - Model: COM-7
  - Drive: Electric, 7.5 HP
  - Drum Capacity: 2000 m of .322 EM Cable
  - Location: Aft winch Deck, Port
- Oceanographic Winch (primarily for CTD casts)
  - Manufacturer: Markey
  - Model: DESH-5
  - Drive: Electric
  - Drum Capacity: 10,000 m of .322 EM cable
  - Location: Aft winch Deck, centerline
- Trawl Winches (2)
  - Manufacturer: Marco
  - Model: WT292
  - Drive: Hydraulic
  - Drum Capacity: 1,200 fathoms of 5/8" wire or 1,000 fathoms of 3/4" wire
  - Location: Aft winch Deck, Port and Strb.

## Cranes and Booms

- Aft Working Deck Crane
  - Manufacturer: HIAB
  - Model: HIAB 450
  - Wire size: 9/16"
  - Length of wire: 180' lifting cable
  - Lifting Capacity:
    - 15,200 lbs at 14' 1" extension
    - 5,000 lbs at 44' 11" extension
  - Location: aft working main deck
- RHIB Single Point Crane
  - Manufacturer: Allied Systems Co.
  - Model: Davit 5000
  - Wire size: 5/8"
  - Length of wire: 70' lifting cable
  - Lifting Capacity:
    - 5300 lbs at 14' extension
  - Location: Boat deck, starboard side
- Boat Deck Crane
  - Manufacturer: HIAB
  - Model: HIAB 200
  - Wire size: 9/16"
  - Length of wire: 200' lifting cable
  - Lifting Capacity:
    - 6000 lbs at 16.3' extension
  - Location: Boat deck, starboard side

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## A and J Frames

- A frame
    - Lifting capacity: 10,000 lbs SWL
    - Location: Aft working main deck
    - Drive: Hydraulic rams
    - Height of A-frame over deck: 29.5'
  - J-Frame
    - Lifting capacity: 3500 lbs SWL
    - Location: Aft winch deck, port side
    - Drive: Hydraulic rams
    - Height of J-frame over winch deck: 17'
    - Height over main deck: 24'-7"
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## Ground Tackle

- Bower anchor
    - Quantity: 2
    - Type: Stockless style, USN
    - Weight (each): 3,500 lbs
  - Anchor chain
    - Quantity: 2
    - Size and Type: 1 - 1/4 in. ABS Grade 2 stud link
    - Length: 8 shots port, 6 shots starboard
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## Boats

- Rescue Boat
  - Quantity: 1
  - Type: Rigid Hull Inflatable Boat (RHIB)
  - Manufacturer: Ambar Marine 550
  - Length: 24 Ft
  - Capacity: 7 people
  - Propulsion: Twin 60 HP Mariner
  - Davit: Single point launching system, with constant tension crane.
- Utility Boat
  - Quantity: 1
  - Type: Fiberglass
  - Manufacturer: Boston Whaler
  - Length: 22'
  - Capacity: 11 people
  - Propulsion: 150 hp OMC gasoline outboard

NOTE: During mammal operations the Boston Whaler is replaced with a larger RHIB.

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## Engineering

### General

- Cruising Speed: 10.5 knots
  - Range: 8,000 nmi
  - Power: 1,600 SHP
  - Fuel Capacity: 164,484 gals
  - Fuel Type: #2 diesel
  - Fuel Consumption: 2000 gal/day
  - Endurance: 30 days
  - Endurance Constraint: Stability
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## Propulsion Plant

- Type: Diesel Electric; 600 VAC, 60 Hz, 3Ø Generators, SCR Power Converters, DC Motors
  - Main Propulsion Motors
    - Quantity: 2
    - Type: 750 VDC, Reversible
    - Manufacturer: General Electric
    - Model: 42G972
    - Rated Power (each): 800 HP
  - Propellers
    - Quantity: 2
    - Size: 96 in diameter
    - Blades: 4, fixed pitch
    - Rotation: Inboard turning (one right hand, one left hand)
    - Shafts: 7.25 in diameter
  - Bow Thruster
    - Type: Tunnel Thruster
    - Manufacturer: Schottel
    - Model: S-300-L
    - Motor: 750 VDC, Reversible
    - Rated Power: 550 HP
    - Diameter: 300 mm (51.2")
    - Blades: 4
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## Freshwater System

- Storage Capacity: 4,882 gallons
  - Average Daily Consumption: 2000 gallons/day
  - Maximum Production: 3000 gallons/day
  - Distilling Plant
    - Quantity: 2
    - Type: Waste heat recovery (generator jacket water)
    - Manufacturer: Alfa Laval Nirex
    - Model: JWP-36-125
    - Rated Capacity: 3,000 gpd
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## Pollution Control

- Sewage Waste Control
    - Type: Collection, Holding & Transfer
    - Manufacturer: Omnipure
    - Holding Capacity: None
  - Oily Waste Control
    - Type: Oily Water Separator
    - Manufacturer: Parmatic
    - Model: S1-8-A
    - Holding Capacity: 3000 gallons
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## Electrical System

- Ship Service / Propulsion Generators
  - Quantity: 4
  - Type: Diesel
  - Manufacturer: Caterpillar
  - Model: D398TA
  - Rated Power (each): 600 kW
  - Output Voltage: 600 VAC, 60 Hz, 3Ø
- Ship Service Transformer
  - Quantity: 3
  - Rated Power: 500 kVA
  - Voltage: 600/450 VAC, 60 Hz, 3Ø
- "Clean Power" Motor Generator
  - Quantity: 2
  - Manufacturer: Kato
  - Model: K23952000
  - Rated Power: 200 kW
  - Motor: 300 Hp
  - Output Voltage: 450 VAC, 60 Hz, 3Ø
- Emergency Generator
  - Quantity: 1
  - Manufacturer: Caterpillar 3406TA
  - Rated Power: 250 kW
  - Output Voltage: 450 VAC, 60 Hz, 3Ø
- Electrical Service
  - Ship Service
    - 450 VAC, 60 Hz, 3Ø
    - 120 VAC, 60 Hz, 1Ø
  - Isolated "Clean" Power for electronics and scientific equipment
    - 450 VAC, 60 Hz, 3Ø
    - 120 VAC, 60 Hz, 1Ø

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## Communications Systems

- VHF/FM Marine Band Transceivers (2 - Raytheon RAY-90's)
  - HF Marine Band Transceivers (2 - Raytheon RAY-152's)
  - Skycell Transceiver
  - NOAA Frequency VHF-FM Transceiver (Motorola MaxTrax)
  - Portable VHF-FM Transceivers (8 Motorola Saber R)
  - Radio Teletype Capability
  - NAVTEX Receiver
  - Cellular Phone
  - Satellite Systems:
    - INMARSAT Standard A Radio Transceiver
    - INMARSAT Standard C Radio Transceiver
    - Iridium Phone
  - E-mail address is:  
[Noaa.Ship.Gordon.Gunter@noaa.gov](mailto:Noaa.Ship.Gordon.Gunter@noaa.gov)
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## Navigation

- Gyrocompass (Sperry MK 227)
  - Global Positioning System (GPS) Receivers
    - Magnavox MX-200 Differential GPS
    - Northstar 952X GPS
    - Trimble Centurion P-Code GPS
    - Magnavox MX-50R Beacon Receiver
  - LORAN C Receiver (Northstar 800)
  - Nobeltec's Visual Navigation Suite
  - Traditional paper charts
  - Rader: X-Band and S-Band Radar with ARPA Display (Raytheon ST)
  - Doppler Speed Log (Sperry SRD-421)
  - NAVTEX GMDSS compliant 518 KHz receiver
  - Weather fax
  - Fathometers: Simrad EQ-50 (50 KHz and 200 KHz) and Raytheon DE795IMO.
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